Royal Papworth Hospital
NHS Foundation Trust

Agenda item 3.ii

Report to:	Board of Directors	Date: 4 May 2023
Report from:	Chief Nurse and Medical Director	
Trust Objective/Strategy:	GOVERNANCE: Patient Safety, Effectiveness of Care, Patient Experience and DIPC	
Title:	COMBINED QUALITY REPORT	
Board Assurance Framework Entries:	Unable to provide safe, high-quality care BAF numbers: 742, 675, 1511 and 1878	
Regulatory Requirement:	CQC	
Equality Considerations:	None believed to apply	
Key Risks:	Non-compliance resulting in poor outcomes for patients and financial penalties	
For:	Information	

1. Purpose:
The Medical Director and Chief Nurse would like to highlight the following items in addition to the Papworth Integrated Performance Report (PIPR) to the Board:

2. Serious Site Infection (SSI) Rates
Quarter 4 data demonstrates SSI rates at 8.5% (Quarter 3: 8.1%) for coronary artery bypass graft (CABG) surgery inpatients and readmissions.

Work continues to ensure best practice is implemented and monitored. Further scrutiny and peer review has been invited to understand any further opportunities for improvement.

3. Community of Practice – Patient Safety Framework
The Trust is engaged with the ISC systems approach to the National Patient Safety changes and how we are working together through a Community of Practice (COP) approach to be able to implement the required changes to work towards embedding the Patient Safety Incident Response Framework (PSIRF). One of our named senior Patient Safety Specialist attend this monthly meeting. This COP was established in 2022 and it has been agreed to continue the funding through the ISC to enable an additional 6 months from April 2023. The aims of the COP are to:

- Participants develop and share common principles for patient safety to ensure consistency within the system.
- To support the patient safety specialist roles to embed as part of the wider patient safety quality team.
- To enable the facilitation of change across the system.
- To reach out to the wider health community and enable them to utilise a Community of Practice.
- Development of a safe space for productive conversations to discuss the implementation of learning, ensuring quality improvement and the creation of a culture of learning
- Learning from good practice and celebrating success

Further updates will be presented through our Quality and risk governance structure over the next few months and updates to board will be part of these updates.

4. **Head of Quality Improvement and Transformation**
The Trust welcomes Jacqui Wynn who joins the Chief Nurse's Team on 2nd May as Head of Quality Improvement and Transformation. Jacqui joins us with a wealth of experience in this area and we look forward to her expertise in furthering our approach to Quality Improvement.

5. **Inquests**

Patient A
Patient underwent TAVI to treat severe aortic stenosis. Post-operatively developed delirium and later an infection which was treated with antibiotics. Whilst recovering, continued to be intermittently confused and suffered an unwitnessed fall. Then experienced pain in right thigh and was transferred to Addenbrookes Hospital for further investigation. Diagnosed with a right hip fracture, although this was stable and did not require surgical intervention. Sadly, patient then developed further delirium and aspiration pneumonia resulting in increased general frailty and a spontaneous internal bleed. Patient continued to decline and sadly died.

Incident Investigation (WEB45434)
The patient's fall was reported as an incident and investigated as moderate harm. The outcome, learning and actions will be presented at QRMG in April.

The root cause of the fall was unclear as the patient had an unwitnessed fall. However, there are additional learning points in relation to the reassessment for risk of falls after the TAVI, as it is not perceived as being a change in condition. The patient's fluctuating delirium, including pattern of behaviours was not formally reviewed with a clear management plan because there is no guidance for patients outside of critical care. This may not have prevented the fall but would have assisted decision making for increased observations. Current practice relies on the experience and skills of the staff on duty. The investigation was shared with the patient's family and Coroner ahead of the inquest.

Medical cause of death:
1a Spontaneous gastrointestinal haemorrhage
1b Delirium with intermittent aspiration and progressive frailty
1c Aortic stenosis (post transcutaneous valve implantation), right periprosthetic femoral fragility fracture secondary to fall.
2 Osteoporosis, hypertension, Type 2 diabetes, chronic obstructive lung disease

Coroner's Conclusion:
Died as a result of post-operative complications of necessary cardiac surgery, those complications including a fall and resulting hip fracture.

Patient B
Patient had a pulmonary endarterectomy due to extremely severe pulmonary hypertension secondary to chronic thromboembolic disease.

The patient was initially stable but deteriorated on the third postoperative day with increasing hypoxia secondary to reperfusion lung injury, a known complication of the surgery. After a week on VV ECMO support, lungs had cleared, was successfully weaned from ECMO and decannulated, remaining on full anticoagulation, both for ECMO circuit and chronic thromboembolic disease.

Two weeks post-surgery patient deteriorated further with evidence of sepsis. The following day their neurological status suddenly deteriorated, and an urgent CT scan showed an intracerebral haemorrhage. This is a known complication of an anticoagulation treatment regimen and also ECMO support and following a pulmonary endarterectomy. A craniotomy was performed at

Addenbrookes Hospital, but the patient deteriorated further with worsening respiratory failure and was transferred back to Royal Papworth on full ECMO support. A week later was again weaned off ECMO and decannulated, requiring ongoing support for sepsis and dependent on hemofiltration. The next day the patient decompensated further and rapidly developed multi organ failure from which it was not possible to resuscitate and sadly died.

Medical cause of death:
1a Right ventricular failure
1b Pulmonary Emboli and Infarcts
1c Chronic thromboembolic pulmonary hypertension (operated on)
2 Subdural haemorrhage (operated on) and cerebral oedema.

Coroner's Conclusion:
Died from complications following an elective pulmonary endarterectomy surgical procedure undertaken for chronic thromboembolic pulmonary hypertension.

Patient C

Patient underwent an emergency repair of an acute Type A aortic dissection. The patient had a past medical history of hypertension and polycythaemia rubra vera (a rare condition in which the bone marrow makes too many blood cells). The surgery was uneventful and technically satisfactory, and the patient was returned to the critical care ward with post operative instructions to maintain a Mean Arterial Pressure (MAP) between 65-85mmHg prior to weaning off sedation. It was noted that there were periods post operatively when MAP was outside the prescribed parameters.

The plan was to progress to extubation. The patient was laid flat and started coughing and became distressed (the morphine infusion was re-commenced). The attending medical team noted that the patient had an episode of significant high blood pressure, which culminated in a catastrophic bleed and haemodynamic collapse which required emergency surgery. The patient had suffered an aortic rupture, which is a known post operative complication of the high-risk aorta surgery.

The management of the patient's blood pressure was investigated and concluded that there was a missed opportunity to control the patient's blood pressure by re-sedating them when they awoke and was coughing. The investigation further concluded that in the 14 hours prior to the acute deterioration measures could have been taken earlier to reduce their MAP which may have reduced the risk of aortic rupture.

Medical cause of death:
1a) Diffuse Hypoxic Brain Injury
1b) Post-operative haemorrhage from anastomosis
1c) Acute aortic dissection (operated on)
2) Hypertension.

Coroner's Conclusion:
Died from a known post operative complication of high-risk aorta surgery.

Patient D

Admitted to hospital following a routine dialysis appointment where patient presented with symptoms of a chest infection. During the course of treatment, the patient developed serious cardiac symptoms and received lifesaving treatment including the insertion of an implanted cardioverter defibrillator (ICD). Subsequently developed an infection (a recognised complication) at the site of the ICD causing the ICD to be removed. Despite further treatment for the infection the patient's condition deteriorated and sadly died.

Medical cause of death:

1a	Sepsis
1b	Infected Implantable Cardioverter-Defibrillator
2	Ischaemic Heart Disease, End-stage Renal Failure, Heart Failure

Coroner’s Conclusion:
Narrative Conclusion - Patient died of Natural Causes contributed to by a recognised complication of necessary, lifesaving treatment.

The Trust currently have 111 inquests pending.

6. Recommendation

The Board of Directors is requested to note the content of this report.